



S/N 09/921,948

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Michael P. Violette  
Serial No.: 09/921,948  
Filed: August 3, 2001  
Title: ANGLED IMPLANT TO IMPROVE HIGH CURRENT OPERATION OF BIPOLAR TRANSISTORS

Examiner: Dana Farahani  
Group Art Unit: 2814  
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AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents  
Washington, D.C. 20231

This paper is in response to the Office Action mailed on August 14, 2002. Please amend the above-identified patent application as follows.

IN THE CLAIMS

Please add new claims 34-41:

c1  
34. (New) A transistor, comprising:  
an emitter having an emitter surface area;  
a base having a base surface area;  
a collector in contact with the base;  
a collector plug in the collector;  
a first implant region intermediate the base and the collector, the first implant region having an implant surface area greater than the emitter surface area and less than the base surface

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a second implant region in the collector plug.

35. (New) The transistor of claim 34, wherein the first implant region and the second implant region are positioned at a same depth.

36. (New) The transistor of claim 34, wherein the first implant region and the second implant region are simultaneously formed by an angled implant such that areas of the first implant region and the second implant region are greater than areas of the openings through which the first